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On BRADYCINETUS and BOLBOCERAS of North America, with notes on other Scarabæidæ.

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Boucomont in "Genera Insectorum," family Geotrupidæ, 1902, p. 3, regards *Bradycinetus* as a subgenus of *Athyreus*, which, according to his own definitions of *Athyreus*, will not hold good. He distinguishes *Athyreus* and *Bradycinetus* from *Bolboceras* by having the intermediate coxæ separated by "toute la largeur du mesosternum, qui est aussi large que long." This is of course not the case in the species of *Bradycinetus*, in which the intermediate intercoxal process is longer than broad and always narrower between than behind the coxæ, the latter separated by about one-fourth or one-half of the process in its widest part behind the coxæ. The intermediate coxæ in *Bolboceras* are "contigues ou séparées seulement par la pointe du mesosternum, ou alors mesosternum étroit, plus long que large." It is very evident that the author has not examined any of the species of *Bradycinetus*, which is to be regretted as in a work like "Genera Insectorum" such mistakes could and should have been avoided. *Bradycinetus* is much more closely related to *Bolboceras* than it is to *Athyreus;* the general form, different intermediate intercoxal process, scutellum and other characters separate *Athyreus* readily from *Bradycinetus* and *Bolboceras,* while the difference between the last two genera is only slight. A close study of the one-hundred and thirty nine species enumerated by Boucomont may even show that *Bradycinetus* is not distinct from *Bolboceras,* which I am rather inclined to believe, as the width of the intermediate intercoxal process in *Bradycellus carinatus,* described below, is already narrower between the coxæ than in the other species. For the present I keep the genus distinct till a critical study of all the species is made, which can only be done by those possessing sufficient material of the foreign species.

Bolboceras farctum and var. *tumefactum* have the intermediate coxal process between the coxæ elevated into a tooth-like elevation, which, together with the entirely divided eyes, to which Linell* has already called attention, necessitates the erection of a new genus.

The intermediate intercoxal process is in all our species broader behind the coxæ, slightly elevated and generally distinctly limited on each side, free from any hairs and very plainly visible.

For completeness I have given in the following table all the genera of the Geotrupini, which occur in our fauna, and also have included for comparison the genus *Athyreus*, which does not occur in the United States :

TABLE OF THE GENERA OF GEOTRUPINI.

1. Club of antennæ lenticular..2.
   Club of antennæ lamellate....................................**Geotrupes.**
2. Middle coxæ very widely separated, the process separating the coxæ as broad as long and of nearly equal width....................**Athyreus.**
   Middle coxæ narrowly separated, the process longer than broad and always narrower between than behind the coxæ...........................3.
3. The intermediate intercoxal process between the coxæ less than one-fourth the process in its widest part behind the coxæ.....................4.
   The intermediate intercoxal process between the coxæ one-fourth or more as wide as the process in its widest part behind the coxæ. **Bradycinetus.**
4. Eyes partially divided ....**Bolboceras.**
   Eyes entirely divided.......... ....5.
5. Intermediate intercoxal process between the coxæ with a vertical tooth-like elevation ....**Bolbocerosoma.**
   Intercoxal process without tooth-like elevation between the coxæ. **Odontæus.**

BRADYCINETUS Horn.

Judging from the published accounts the more widely separated middle coxæ seems to be the only character distinguishing this genus from *Bolboceras*.

Excluding *minor* Linell and *hornii* Rivers, which are placed in *Bolboceras* for reasons given under that genus, our five species can be distinguished by the following table:

TABLE OF THE SPECIES OF BRADYCINETUS Horn.

1. Apex of middle and hind tibiæ when viewed from the outer side deeply emarginate ....2.
   Apex of middle and hind tibiæ truncate ....3.
2. Shining, side margin of thorax distinctly serrate..........**fossatus** Hald.
   Dull, side margin of thorax entire..................**ferrugineus** Beauv.

Proc. U. S. Nat. Mus., vol. xviii, p. 723.

3. Thorax near apex with a slightly uneven, transverse carina joining at sides the lateral carina, left mandible regularly arcuate.................5.
Thorax near apex with a transverse row of punctures, but without carina, left mandible near apex obliquely bent inside, the outer angle of the bent portion broadly rounded, intermediate intercoxal process between the coxæ about one-half as wide as the process in its widest part behind the coxæ ....4.
4. Scutellum and elytra shining, striæ of elytra relatively deeply impressed and distinctly punctate.................. ....**serratus** Lec.
Scutellum and elytra finely alutaceous, giving the surface a somewhat dull aspect, elytral striæ very feebly impressed and very finely punctate, var. **peninsularis** new var.
5. Intermediate intercoxal process between the coxæ slightly contracted and almost one-fourth as wide as the process in its widest part behind the coxæ...**carinatus** n. sp.

Bradycinetus carinatus n. sp.—Form of *serratus*, but slightly more robust, ferruginous, shining; thorax near apical margin with a transverse carina, which is on each side slightly bent, joining the lateral carina at sides. Head closely and coarsely punctate, punctuation sparser behind; left mandible regularly arcuate; clypeus elevated, nearly quadrate, at base on each side a tuberculiform elevation, connected with each other by a slightly arcuate carina, behind this a short indistinct cariniform elevation. Thorax in front retuse, the impressions in front and at sides moderately punctate and with sparser, coarser punctures intermixed, disk nearly impunctate, except a few punctures on the median line and at sides, near apical margin a slightly bent transverse carina which joins at sides the lateral carina, lateral margin crenate. Scutellum smooth at base, broader than long. Elytral striæ finely impressed and not coarsely punctate; intervals flat, apparently impunctate. Underside and legs with moderately long hairs; intermediate intercoxal process slightly contracted between the coxæ, and about one-fourth as wide as the process behind the coxæ and coarsely punctate at side. Middle and hind tibiæ on the outer side obliquely truncate at apex. Length, head porrected, 11–15 mm.

Huachuca Mts., Arizona; occurs also in Lower California, where it was taken at Santa Rosa and El Taste by Mr. Gustav Beyer.

The two sexes do not differ very much. What I consider the male has the clypeus in front of the arcuate ridge more obliquely descending and longer than the females, and has no tuberculiform elevations on each side, but this latter character is not always well pronounced in the females, especially the smaller which have the tubercles generally entirely lost. This is very distinct from our other species by the contracted and narrower intermediate intercoxal process, the regularly arcuate mandible and the frontal carina of thorax.

The process between the intermediate coxæ is narrower in this than in the other species, and is a step towards uniting *Bradycinetus* with *Bolboceras*.

Bradycinetus serratus var. **peninsularis** new. var.

Agrees in every respect with *serratus*, except that the scutellum and elytra are finely alutaceous and not shining, the striæ are extremely fine and very finely punctate ; the elytra seems to be also not as convex and more parallel than in *serratus* and slightly broader behind. These differences give the specimens a distinct aspect and are constant in the large number of specimens seen which were all collected by Mr. Mr. Gustav Beyer in Santa Rosa and San Felipe in Lower California.

Bradycinetus serratus Lec.

This is the commonest of our species and well known ; it occurs in Texas and Arizona.

The intermediate intercoxal process between the coxæ is about one-half as wide as the process in its widest part behind the coxæ and is not contracted in front, it becomes gradually wider behind.

Bradycinetus ferrugineus Beauv.

This and *fossatus* Hald. are our largest species and seem to be quite rare in collections. The intermediate intercoxal process in *ferrugineus* is comparatively longer and slightly narrower as in *serratus* Lec. Viewing the middle and hind tibiæ from the outer side, there will be seen in the former at middle of apex and in the latter at the interior angle a tooth-like prolongation ; Dr. Horn called this emarginate, which expression I have used in the synoptic table. This emargination we find in *ferrugineus* Beauv., as well as in *fossatus* Hald., while all our other species of this genus and *Bolboceras* have the outer side of middle and hind tibiæ at apex obliquely truncate. In *ferrugineus* the sides of thorax are not serrate, at most slightly irregular. It is recorded from the Southern States, my specimen and others I have seen are from Florida.

Bradycinetus fossatus Hald.

Unfortunately I have no specimens of this species, which occurs in Texas and I believe I have also seen a female of this species from Missouri. It is of the same size as *ferrugineus* Beauv., but more shining and has the sides of thorax serrate. Dr. Horn describes the thorax of the male as being suddenly elevated in front, the anterior angles of the elevation acute and project outward, on each side a deep groove or fossa limited exteriorly by an obtuse tooth-like elevation. In the male of *ferrugineus* Beauv. the thorax has in front of the elevated portion on each side a slightly recurved sharp tooth and each side near base a somewhat broad obtuse projection, the clypeus is broadly emarginate, with the angles prominent ; the clypeus in *fossatus* Hald. is strongly bisinuate.

BOLBOCERAS Kirby.

This genus is principally distinguished from the allied genera by the contiguous or nearly contiguous intermediate coxæ, and the eyes not entirely divided.

Bradycinetus hornii Rivers and *minor* Linell have the intermediate coxæ very narrowly separated, nearly contiguous, and must therefore be placed in *Bolboceras*.

For *Bolboceras farctum* Fab. I was compelled to erect a new genus on account of the entirely divided eyes and the intermediate intercoxal process having between the coxæ a tooth-like elevation.

The three species known to occur within our faunal limits may be known by the following table:

TABLE OF THE SPECIES OF BOLBOCERAS.

1. Hind tibiæ with one transverse ridge on the upper edge, slightly below middle..**lazarus** Oliv.
   Hind tibiæ with two distinct transverse ridges on the upper edge, one smaller, about middle, the other larger, about apical fourth ....2.
2. Large species, about 14 mm. long, anterior angles of thorax obtusely rounded, metasternum densely covered with long hairs..........**hornii** Riv.
   Small species, about 9 mm. long, anterior angles of thorax acute, metasternum sparsely clothed with moderate long hairs...........**minor** Linell.

Of our three species *lazarus* Oliv. is very common widely distributed and well known ; *minor* Linell, which occurs in S. Texas is very similar to the Californian *hornii* Rivers, from which it differs, besides the characters given in the table, by the more elongate scutellum, coarser elytral striæ, slightly longer antennal joints and club, the short, conical frontal horn of the male and having the intermediate coxæ not quite as narrowly separated. Both species—*hornii* Riv. and *minor* Linell—resemble *farctus* Fab. very much in form as well as in the armature of the head and thorax of the males.

The description and figure of the Mexican *Bolboceras arcuatus* Bates* agrees in nearly every respect with *Bradycinetus minor*

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* Biol. Cent. Am., vol. ii, pt. 2, p. 111.

Linell, except that none of the fifteen specimens which I have examined, have a smooth space on the vertex, which is nearly as coarsely punctured as the head in front. One specimen only has the vertex more feebly punctured, and it is possible that this is variable in the Mexican species also and that the two will prove on comparison to be the same.

BOLBOCEROSOMA n. gen.

Eyes completely divided, intermediate intercoxal process between the coxæ with a tooth-like elevation, intermediate coxæ very narrowly separated, nearly contiguous. Other characters as in *Bolboceras*.

Type.—*Scarabœue farctus* Fab.

Bolbocerosoma farctum Fab.

In this well known and widely distributed species the number of striæ differ. Those in which the second and fifth striæ are absent or partly indicated are *farctum* Fab., those with seven entire striæ are *tumefactum* Beauv. Intermediate specimens occur and it is therefore hardly necessary to retain the latter name, as there is otherwise no difference between the two forms.

Canthon humectus Say (**indigaceus** Lec.).

In Henshaw's "Third Supplement to the Coleoptera of America North of Mexico," *humectus* is given as an additional species, but is according to Dr. Horn,[*] the same as *indigaceus* Lec.

Copris arizonensis n. sp.—Form of *mœchus* and *remotus* but larger. The male has the clypeus broadly emarginate, head in front coarsely punctate, behind smooth, frontal horn slightly arcuate. Thorax with a narrower median protuberance than in *remotus* or *mœchus*, which is at apex triangularly emarginate with the angles rounded, the latter straight, not divergent, surface of the protuberance slightly flattened, without longitudinal median impression, on each side near side margin a horn-like straight projection, the surface between these and the median protuberance deeply excavated and coarsely but rather sparsely punctate, between the usual short carina near side margin and the horn is at about middle a shallow fovea, which is coarsely punctured, surface of thorax coarsely punctured, densely at sides, more finely and sparsely punctured at middle of the disk; side margin of thorax oblique in front, front angles acute, hind angles broadly rounded.

The female has the clypeus triangularly emarginate, the frontal horn is shorter, dilated at apex and feebly emarginate, the median protuberance of thorax is broadly rounded in front, with a slight median impression at apex, the projections on each side are much smaller, in form of a conical tubercle, and the whole surface is more densely punctate than in the male.

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[*] See Bates, Biol. Cent. Am., vol. ii, pt. 2, pp. 385 and 386.

The elytral striæ have an impressed line and relatively small rounded punctures which are not closely placed. Length, male, 18 mm.; female, 20 mm.

Huachuca Mts., Arizona.

This species is readily distinguishable from *remotus* and *mœchus* by the sides of thorax oblique in front, not sinuate near the front angles, the larger size, the form of median prothoracic protuberance of male and the relatively small rounded punctures of elytral striæ, which are rather transverse in *mœchus* and *remotus*. With the Mexican species, having the sides of thorax near front angles not sinuate, it can only be compared with *klugi*, the male of which is said to have the thoracic foveæ and disk smooth, and the female the posterior part of thorax smooth.

Small males and females of *mœchus* have the thorax more densely punctate than the larger specimens.

Baron Harold,* in the table given of the Mexican species, has separated a small number from the rest of the species, which have the sides of thorax very near the front angles sinuate, which gives these a tooth-like appearance. This character is very evident in good preserved examples, but can also be traced in old worn specimens. The following table, which I prepared from Dr. Horn's material in Philadelphia for my own use, is given below with the hopes that it may prove useful to others in the identification of the North American species:

TABLE OF THE SPECIES OF COPRIS.

1. Sides of thorax near apical angles sinuate ....5.
   Sides of thorax near apical angles not sinuate ....2.
2. Underside of thorax, at sides in front of the transverse carina, strongly declivous, smaller species, about 9-11 mm..............................3.
   Underside of thorax, at sides in front of the transverse carina not or feebly declivous, larger species, 15-20 mm...............................4.
3. Head, thorax and elytra smooth or very feebly obsoletely punctured, impressed basal marginal line almost impunctate, clypeal horn of male short, conical.....................................**gopheri** Hubbard.
   Head at sides and thorax rather coarsely punctured, elytral intervals finely punctate, impressed basal marginal line coarsely punctured, clypeal horn of male elongate ....**minutus** Drury.
4. Thorax with a deeply impressed and coarsely punctured median line, male with two frontal horns, the posterior one small, projecting obliquely forward....................................**prociduus** Say.

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* Ann. Soc. Ent. Fr., 1863, p. 494.

Thorax without or in the female with at most a very feeble impressed median line; male with one, slightly arcuate, long frontal horn, median protuberance of prothorax narrow, with the apical angles not divergent. **arizonensis** n. sp.

5. Thorax dull, coarsely and very closely punctate, clypeus acutely incised. **anaglypticus** Say.

Thorax shining...6.

6. Clypeus broadly emarginate, median prothoracic protuberance of the male broad, with apical angles divergent, frontal horn of male arcuate. **remotus** Lec.

Clypeus triangularly emarginate; median thoracic protuberance of male narrow, angles straight, not divergent, frontal horn nearly straight. **mœchus** Lec.

The two species of *Pinotus* occurring in our fauna are only distinguishable from each other in the males. *P. colonicus* Say has the head in the male with two tubercles, and *P. carolinus* Linn. has the head with one tubercle in the male, otherwise there does not seem to be any difference.

LACHNOSTERNA Hope.

The late Ottomar Dietz collected in Brownsville, Texas, a specimen of *L. exorata* Horn and also several specimens of *L. æqualis* Lec., which I suspect to be the two sexes of one species; the former was described from the male, and the latter from the female. The form of head and thorax, the sculpture, the very short, squamiform hair in each puncture, and the more prominent upper tooth of the front tibia are the same in both, the difference in form is exactly like that seen in the two sexes of *lanceolata* Say. Taken all this in consideration, and the fact that Dr. Horn did not have a specimen of *æqualis* when he wrote his descriptions for the "Revision of the species of Lachnosterna," I think there is very little doubt of the correctness of my view, inasmuch as *exorata* looks strange in its present place.

The locality for *L. heterodoxa* and *fucata* was given by Dr. Horn as "southern Arizona or possibly in Chihuahua." Of the former I have taken several specimens at light in the Huachuca Mountains, Arizona, and received of the latter one specimen from Bisbee, Arizona, collected by my brother.

The following species appear to be new, and their identification will not cause any trouble, as they have strong characters which separate them easily from their nearest allies.

Lachnosterna arkansana n. sp.—Oblong, slightly broader behind, castaneous, shining. Clypeus moderately reflexed, apex distinctly but not deeply emarginate, surface and front of head coarsely punctuate, the latter more densely than the clypeus. Antennæ ten jointed, club as long as the preceeding joints. Thorax broadest at base, obliquely narrowed in front, behind slightly sinuate, margin feebly crenate, more so behind middle; surface coarsely and rather closely punctate, at middle of disk a short, longitudinal, smooth, median space. Elytra rugose, punctuation scarcely distinct; discal costæ feebly distinct, the submarginal scarcely visible. Pygidium convex, punctures not densely placed, coarse and partly confluent. Metasternum densely covered with long hairs. Abdomen finely and sparsely punctate at sides, the last two segments more coarsely. Last joint of maxillary palpi elongate, as long as the two preceding joints, not impressed. Claws arcuate, with a strong acute tooth at middle. Length 21 mm.

Male.—Antennæ ten-jointed, club as long as the preceding joints. Abdomen slightly flattened at middle, penultimate segment with an arcuate, feebly elevated rugose ridge at middle, behind which the segment is slightly depressed, not emarginate at apex. Hind tibiæ squarely truncate at apex, inner spur fixed and one-half as long as the outer spur, which is long and very feebly curved.

Arkansas. One male from Mr. Chas. Palm.

This species belongs with *fusca* and allies, the clypeus being coarsely but not densely punctate, and the thorax widest at base. From all of the species of this group it will be readily distinguished by the more coarsely rugose elytra, obliterating nearly the punctuation. From Linell's *karlsiœi* it differs in being smaller and having a different form of ridge of the penultimate ventral segment. The genitalia are also different from any of those described and figured by Prof. Smith, but are unfortunately lost.

Lachnosterna pygidialis n. sp.—Oblong, broader behind, brown, shining. Clypeus flat, margin very feebly reflexed, apex distinctly emarginate, surface and front of head coarsely and densely punctate and clothed with erect hairs, which are shorter on the clypeus than on the front. Thorax slightly broader at base than at middle, narrowing to the front from about middle, behind nearly straight; side margin feebly crenate, basal margin on each side near hind angles impressed; surface relatively finely and not densely punctate, with rather long fulvous hairs. Elytra much more coarsely and closely punctate than the thorax, feebly rugose and shining, sparsely clothed with shorter recumbent hairs and some longer ones near base; discal costæ very feeble, submarginal costæ more distinct. Pygidium feebly convex, margin at apex reflexed, surface not densely but asperately punctate and sparsely pubescent with moderate, long hairs. Metasternum densely clothed with long fulvous hairs, pubescence of abdomen much shorter and sparser, last three abdominal segments coarsely and asperately punctate at middle, finer and sparser at sides, penultimate segment at middle not deeply excavated, last segment small, about one-fourth as wide as the penultimate. Hind tibiæ with both spurs free and slender, slightly curved, the inner a little shorter than the outer, apex of tibiæ truncate; claws feebly curved, the tooth small and nearer the base than the middle. Length 17 mm.

Indian River, Florida. One male in coll. Dietz.

This species enters Dr. Horn's group XII (*crenulata*), and has to be placed with *rubiginosa* and *parvidens*. From both it differs by the much more densely punctate clypeus and front, the much finer punctuation of thorax, which latter is also narrower, the more coarsely punctate elytra, the form of pygidium, and the entirely different genitalia. The claspers are symmetrical, immobile, not modified. Viewing them from the front, they are small, elongate, narrowing to apex from about middle, the apex emarginate, with the angles slightly divergent, the opening is elongate-oval from the base to the opening, the surface is shallowly canaliculate along the median line. Prof. Smith's figure of *quercus* on Plate lx, fig. 78*a*, in Proc. U. S. Nat. Mus., vol. xi, resemble those of *pygidialis* somewhat, but narrowing in the latter species from about middle, the side view is similar in shape to fig. 78*c*, but simple, not modified at at all, of even outline.

Lachnosterna latidens n. sp.—Oblong, broader behind, pale castaneous, shining. Clypeus short, transverse, margin moderately reflexed, apex emarginate; surface and front very coarsely punctate, head on the occiput smooth, clypeus and front with moderate long, erect hairs. Thorax broadly rounded and widest at about middle, strongly narrowing from this point to apex and base, side margin slightly uneven; surface coarsely, irregularly and sparsely punctate, with a few smaller punctures intermixed, sides, apical and basal margins with a few sparse, long, erect hairs. Elytra slightly rugose, sparsely and more finely punctate than the prothorax, sutural costæ distinct, discal and submarginal costæ obliterated, from each of the sparsely placed punctures arises in well preserved examples, a short stiff hair. Pygidium convex, moderately punctate and clothed with short stiff hairs. Metasternum with long yellowish hairs. Abdomen densely and more finely punctate at sides than at middle. Length 15 mm.

Male.—Antennæ ten-jointed, club as long as joints 2–7 together. Abdomen longitudinally impressed at middle, the impression on the penultimate segment finer, and the punctuation of this and the last segment coarser. Both spurs of hind tibiæ free, long, of nearly equal size and slightly curved. Claws strongly curved, with a very broad median tooth.

Arizona.

Female.—Antennæ shorter than in the male. Abdomen feebly impressed but more coarsely punctate in the middle than in the male. Pygidium gibbous at apex. Claws curved, median tooth broader than the apical part of the claw, but not quite as broad as in the male.

Huachuca Mts., Arizona.

By the structure of the claws and the apical gibbosity of the pygidium of the female this species departs from all the North American species, and will be easily recognized. With the Mexican species, having the claws similarly formed, I was unable to identify this species with certainty. The claws in *latidens* are similarly formed as the anterior or posterior claws in *heterodoxa*, but are shorter, slightly more arcuate, and the basal part not quite as prominent as in that species, near which it should be placed.

ANOPLOCEPHALUS n. gen.

Mentum slightly longer than broad at base, parallel behind to a little before middle, thence strongly narrowing to apex, which latter is obtuse; surface very coarsely punctured, with a deep large excavation in about basal half and with long, coarse hairs. Maxillæ short, slightly convex, unarmed, apex strongly oblique, apical margin beneath clothed with stiff hairs, which are visible from above. Maxillary palpi four jointed, first joint small, slightly arcuate, second joint longer than third, the latter slightly arcuate at basal fourth, last joint impressed, fusiform, longer than second. Labial palpi three jointed, first joint short, second not quite twice as long as the first, last joint impressed, longer than the two preceding joints together. Antennal club elongate oval, as long as the preceding joints in the male, shorter in the female. Mandibles small, simple, not visible from above, the external edge only visible beneath. Clypeus unarmed in both sexes, as long as the head, gradually but not strongly narrowing to apex, apical margin strongly reflexed and at middle deeply emarginate, clypeal suture absent. Prothorax wider than long, apex narrower than base, sides arcuate, hind angles rounded; sides, apex and base margined, the basal margin entire, not interrupted. Elytra elongate, nearly parallel, slightly wider behind; striæ deeply impressed and punctate. Prosternum with a post-coxal, prominent, obtuse tooth, partly hidden by the dense, long hairs. Front, middle and hind coxæ strongly transverse. Front tibiæ tridentate and of nearly equal size in the two sexes. Tarsi long; the hind tarsi much shorter in the female than in the male, first joint in the male elongate, nearly twice as long as the second, slightly longer than the second and more dilated at apex in the female; claws equal, simple and alike in the two sexes. Abdominal spiracles situated in the dorsal portion of the ventral segments, except the first, which is situated in the membrane connecting the dorsal and ventral surfaces of the abdomen. Pygidium convex, transverse. No stridulating organs.

Type.—*Anoplocephalus cribrifrons* n. sp.

This genus is difficult to place in the present classification. The unarmed head and thorax, alike in both sexes, would rather bring it in Lacordain's sub tribe *Cyclocephalides*, but differs from all the described genera by the distinct basal margin of the thorax.

As much as I was able to learn from the published descriptions this genus is intermediate between Lacordaire's *Cyclocephalides* and *Oryctides*.

Anoplocephalus cribrifrons n. sp.—*Male.*—Elongate-oval, black, shining, underside and legs piceous or dark castaneous. Head and clypeus coarsely and rather cribrately punctate, front feebly convex; clypeus not separated by a suture, nearly flat, side margin more feebly reflexed than at apex, the latter strongly reflexed and deeply emarginate at middle, sides slightly arcuately narrowing to apex, feebly sinuate near the latter point. Prothorax transverse, simple, without tubercle or impressions, apex narrower than base, sides arcuate; apex, base and sides distinctly margined; hind angles rounded, front angles distinct; surface somewhat sparsely but not coarsely punctured behind, more densely at apex and sides. Elytra elongate-oval, slightly broader behind, surface not strongly convex, striæ deeply impressed with not densely placed ocellate punctures, intervals convex, rugose. Front tibiæ tridentate, middle and hind tibiæ with one well defined and one smaller indistinct ridge; in both, the apex is festooned with a number of more or less triangular teeth. Front and middle tarsi longer than the tibiæ, hind tarsi as long or slightly longer than the tibiæ; first joint of middle and hind tarsi feebly compressed and nearly twice as long as second, all the tarsi equal, simple. Sides of thorax beneath, prosternum and metasternum with moderately long, coarse, fulvous hairs. Last two abdominal segments nearly twice as broad as the preceding, last segment broadly emarginate at apex. Pygidium convex, feebly punctate at middle and apex, finely rugose along basal margin. Length 22 mm.; width 12.25 mm.

The female differs in having the clypeus more feebly reflexed and not as deeply emarginate, the pygidium not as convex, the last abdominal segment not emarginate, first joint of middle and hind tarsi more broadly dilated at apex and the front and middle tarsi slightly shorter, but the hind tarsi much shorter than in the male. Length 24 mm.; width 13 mm.

Huachuca Mts., Arizona.

There is nothing in our fauna with which this species could be compared. It has nearly the form of *Ancognatha manca*, but is longer, more robust, elytra deeply striate, and has a different clypeus and mouth parts.